5

The results were as follows:

volume of sample applied wetted	sonic treatment	fraction of assemblies where the strip was
5 µl	no	0/10 = 0%
10 µl	no	1/10 = 10%
5 µl	yes	10/10 = 100%
10 µl	yes	10/10 = 100%

As shown by the results, 5 and 10 µl samples were sufficient to wet the reaction layers in all the sonically treated assemblies, but almost none of the untreated assemblies. Accordingly, sonic treatment enables the reaction layer in 15 such assemblies to be reliably wetted with 10 µl or even 5 μl of sample.

Thus, sonic treatment of sintered polymers used in assemblies reduces the volume of liquid sample necessary to wet the reaction layer, demonstrating that the void volume was 20 selectively reduced in the sonically treated HDPE.

- 1. An article of manufacture for receiving a liquid sample. comprising a solid having a window and a sintered polymer. wherein a first portion of the polymer overlies the window and a second portion of the polymer overlies the surface of 25 the solid without the window; and wherein the polymer is sonically treated; whereby the void volume in the first portion is less than the void volume in the second portion.
- 2. The article of claim 1, further comprising a means for adhering the sintered polymer to the solid.
- 3. The article of claim 1, wherein the liquid sample is selected from the group consisting of blood, serum, plasma.

sweat, tears, saliva, semen, cerebrospinal fluid, sputum, urine and cervical mucus or swabbings.

- 4. The article of claim 3, wherein the liquid sample is blood.
- 5. The article of claim 1, wherein the surface of the sintered polymer is hydrophilic.
- 6. The article of claim 1, wherein the sintered polymer further comprises a coating of detergent.
- 7. The article of claim 6, wherein the sintered polymer further comprises a coagulant.
- 8. The article of claim 1, further comprising a means for reacting with a liquid sample.
- 9. The article of claim 8, wherein the reacting means is positioned between the sintered polymer and the window of
- 10. The article of claim 8, wherein the means for reacting is a reaction layer.
- 11. The article of claim 10, wherein the reaction layer comprises a reagent that reacts with glucose.
- 12. The article of claim 11, wherein the reagent is N-ethyl-N-2-hydroxy-3-sulfopropyl-3,5-dimethylaniline (MAOS).
- 13. A method for receiving a liquid sample, comprising the steps of applying a liquid sample to an article of claim 1 on the side of the sintered polymer opposite the window and allowing the sample to migrate toward the window. whereby the sample does not migrate away from the window due to the reduced void volume in the first portion.